=> s 261731-66-2/rn 5 261731-66-2/RN

=> d 1-5 pn,ab

L3	ANSWER 1 OF 5 PATENT NO.	CAPLUS KIND	COPYRIGHT DATE	2004	ACS	on	STN
ΡI	WO 2001058963	. A1	20010816				
	DE 10005819	A1	20010823				
	BR 2001008153	A	20030121				
	EP 1287040	A1 .	20030305				
	JP 2003522257	T2	20030722				
	US 2003100673	A1	20030529				
			3.1	/			- i f i

Dispersions containing dispersed and/or emulsified solid and/or fluid polymer AΒ particles and/or dispersed solid core-shell particles with particle diameter ≤500 nm, which may be produced by radical micro- or mini-emulsion polymerization of  $\geq 1$  olefinically unsatd. monomer in the presence of ≥1 C9-16 polyhydroxy (cyclo)alkane, are useful in automobile production and repair painting, furniture painting and industrial painting, including coil coating, container coating and coating of electrotech. components. Thus, a solution consisting of blocked polyisocyanate 200.3, Me methacrylate 99, Bu acrylate 118, styrene 49.5, hydroxypropyl methacrylate 106.6, Ph2C:CH2 7.6, and 2,4-diethyl-1,5-octanediol 19 parts was mixed with 35.1 parts Perkadox 16S and emulsified in 848.9 parts H2O containing 16 parts Abex EP 110 emulsifier to give a mini-emulsion with z-average particle size 215 nm. The emulsion was polymerized 1 h at 70° to give a polymer emulsion (40.1 weight% solids) with z-average particle size 247 nm, which was combined with a thickener and a flow-control additive, sprayed onto a test plate which had been precoated by cathodic electrodeposition, and baked 30 min at 150° to give a multilayer coating with a 57- $\mu m$  clear topcoat.

Ь3	ANSWER 2 OF 5 PATENT NO.	CAPLUS KIND		2004	ACS	on	STN
							•
PI.	WO 2001051537	A1	20010719				
	DE 10001443	A1	20010726				

DE 10001443 Α1 The agent, useful in coatings, sealants and adhesives, can be produced by AΒ reaction of ≥1 primary and/or secondary amine and/or water with ≥1 polyisocyanate in ≥1 low-mol.-weight liquid polyol acting as the reaction medium. Thus, addition of a solution of 7.9 parts hexamethylene diisocyanate in 102 parts BuOAc dropwise over 2 min to a solution of 10.1 parts PhCH2NH2 in 480 parts 2,4-diethyl-1,5-octanediol and stirring for an addnl. 10 min gave a composition with viscosity 8080. 1920, 685, and 308 dPa-s at shear rate 1, 10, 100, and 1000 s-1, resp. The agent was used in a clear lacquer formulation based on a polyacrylate and a polyester binder cocrosslinked with diisocyanates.

L3	ANSWER 3 OF 5 PATENT NO.	CAPLUS . KIND	COPYRIGHT 2004 ACS on STN DATE
PΙ	WO 2000015725	A1	20000323
	DE 19841408	A1	20000323
	DE 19841408	C2	20010215
	BR 9913574	A	20010522
	EP 1119592	A1	20010801
	JP 2002524650	Т2	20020806
	US 6512026	B1	20030128
AB	The powders, e	speciall	ly useful in automotive finishes, con ider containing 0.5-40 weight% of a p
	epoxide-contai	urud pri	ider concarning o.o to werance or or h

nsist of (a)  $\geq 1$ polymerized monomer containing

glycidyl groups and (b)  $\geq 1$  tris(alkoxycarbonylamino)triazine and ≥1 polycarboxylic acid, especially a straight-chain dicarboxylic acid, and/or a carboxy-functional polyester as crosslinking agent or, alternatively, (a) ≥1 tris(alkoxycarbonylamino)triazine and ≥1 oligomeric or polymeric epoxide-containing crosslinking agent containing 0.5-40 weight% of a polymerized monomer containing glycidyl groups and/or a low-mol.-weight epoxide-containing crosslinking agent and (b) ≥1 polymer containing carboxyl groups as binder, whereby both variants contain (c) ≥1 polyol. Thus, Me methacrylate (I) 10.78, Bu methacrylate (II) 25.5, styrene 17.39, and glycidyl methacrylate 23.95 parts were copolymd. to give an epoxide-containing polymer (III), whereas I 17.45, II 14.09, styrene 16.78, and hydroxypropyl methacrylate 18.79 parts were copolymd. to give a polyol (IV). A powder was obtained from III 62.8, dodecanedicarboxylic acid 13.5, a tris(alkoxycarbonylamino)triazine 5.0, IV 14.8, and stabilizers 3.3 parts, and made into an aqueous slurry, which was sprayed at dry thickness 44  $\mu m$  on an electrodip-primed and -coated (Ecostar Jungle Green) and dried steel plate. The coated plate showed equal, or in most cases better, performance properties when compared with an analogous plate treated similarly except that the powder contained no

L3 ANSWER 4 OF 5 USPATFULL on STN

PI US 2003100673 A1 20030529

Aqueous primary dispersions comprising dispersed and/or emulsified, solid and/or liquid polymer particles and/or dispersed solid core-shell particles having a diameter \$\leq 500 \text{ nm, preparable by free-radical microemulsion or miniemulsion polymerization of at least one olefinically unsaturated monomer (A) in the presence of at least one polyhydroxy-functionalized cyclic and/or acyclic alkare having from 9 to 16 carbon atoms in the molecule, and their use in automotive OEM finishing and refinishing, in furniture coating and in industrial coating, including coil coating, container coating and the coating of electrical components.

L3 ANSWER 5 OF 5 USPATFULL on STN

PI US 6512026 B1 20030128

WO 2000015725 20000323

Novel powder clearcoat materials and novel powder clearcoat slurries comprising a) at least one epoxide-containing binder containing from 0.5 to 40% by weight, based on the binder, of copolymerized glycidyl-containing monomers, and b) at least one tris(alkoxy-carbonylamino)triazine and at least one polycarboxylic acid, in particular a straight-chain dicarboxylic acid, and/or a carboxy-functional polyester as crosslinking agent, or alternatively a) at least one tris(alkoxy-carbonylamino)triazine and at least one oligomeric or polymeric, epoxide-containing crosslinking agent containing from 0.5 to 40% by weight, based on the crosslinking agent, of copolymerized glycidyl-containing monomers, and/or a low molecular mass, epoxide-containing crosslinking agent, and b) at least one carboxyl-containing polymer as binder, both variants comprising c) at least one polyol.

=> d his

AB

(FILE 'HOME' ENTERED AT 00:15:47 ON 16 MAR 2004)

FILE 'REGISTRY' ENTERED AT 00:16:00 ON 16 MAR 2004

0 S<sup>2</sup>,3-DIETHYLOCTANE-1,2-DIOL

L2 9 S DIETHYLOCTANE

FILE 'CAPLUS, USPATFULL' ENTERED AT 00:19:45 ON 16 MAR 2004 5 S 261731-66-2/RN

=>

T.3

L1